## DEPARTMENT OF ENVIRONMENTAL QUALITY Environmental Assessment

## Permitting and Compliance Division Water Protection Bureau

Name of Project: Luzenac America, Inc. Yellowstone Mine (LAI Yellowstone Mine)

Location of Project: Sections 3, 4, 5 and 9, T9S, R1W and Sections 32, 33 and 34 of T8S, R1W

**City/Town:** 10 miles south of Cameron, MT **County**: Madison

**Description of Project**: In 2006, LAI Yellowstone Mine was issued MPDES permit MT0028584 to discharge mine pit dewatering wastewater and mine site surface runoff to Johnny Gulch, which ultimately discharges to Cherry Gulch via Ruby Creek Irrigation Ditch. LAI Yellowstone Mine requested a permit modification to substitute use of their gravel pit (Pond 9A) for a proposed Pond 6A required by permit compliance schedule and to add an Outfall 003 from Pond 9A. Substitution of Pond 9A for Pond 6A provides more storm water storage and treatment capacity and provides for operational flexibility. No discharge is allowed from either Outfall 002 or Outfall 003 except as a result of runoff from a rainfall event that exceeds the 10 year, 24 hour storm or equivalent snowmelt. LAI Yellowstone Mine was required by the current permit to develop a Storm Water Pollution Prevention Plan (SWPPP) that utilizes best management practices to minimize the impact of storm water runoff from the mine site.

**Agency Action and Applicable Regulations**: The proposed action of the Department is to modify the MPDES permit.

Applicable rules and statute:

ARM Title 17, Chapter 30, Sub-chapter 5 – Mixing Zones in Surface and Ground Water.

ARM Title 17, Chapter 30, Sub-chapter 6 – Surface Water Quality Standards.

ARM Title 17, Chapter 30, Sub-chapter 7 – Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Sub-chapters 12 and 13 – Montana Pollutant Discharge Elimination System Standards.

MCA 75-5-101 et. seq., Montana Water Quality Act.

**Summary of Issues**: LAI Yellowstone Mine's requested permit modification will add an Outfall 003, intended to be used alternatively with existing Outfall 002. Substitution of Pond 9A for the proposed Pond 6A will add approximately 9 acre-feet of storage capacity, lessening the need to discharge from the series of six storage/sedimentation/infiltration ponds. No discharge is allowed from Outfalls 002 and/or 003 except in the event of runoff from a rainfall event that exceeds the 10 year, 24 hour storm or equivalent snow melt. LAI Yellowstone Mine estimates that sufficient pond capacity exists with the addition of Pond 9A to prevent a discharge from even a 50 year, 24 hour rainfall event.

This environmental assessment addresses only the impacts of the requested modification of the current MPDES permit MT0028584. Additional information on the mine, permitting and impacts is contained in the "Yellowstone Mine - Mine Life Extension Amendment To Operating Permit 00005 – Final Environmental Assessment", July 2006, prepared by the Department of Environmental Quality.

## **Affected Environment & Impacts of the Proposed Project:**

Y = Impacts may occur (explain under Potential Impacts). Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.

N = Not present or No Impact will likely occur. *Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).* 

IMPACTS ON THE PHYSICAL ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES	
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] The permit modification will lessen the probability of a discharge because of increased stormwater storage/treatment capacity.	
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] The permit modification will lessen the probability of a discharge because of increased stormwater storage/treatment capacity.	
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] The permit modification will have no impact on air pollution. Will avoid the dust and other air pollutants that would have been associated with construction of Pond 6A.	
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] The permit modification will not negatively impact vegetation cover, quantity and quality. Will avoid the disturbance associated with construction of Pond 6A.	
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] No negative impact from permit modification.	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL	[N] No negative impact from permit modification.	

IMPACTS ON	THE PHYSICAL ENVIRONMENT
RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No negative impact from permit modification.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No negative impact from permit modification.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] No negative impact from permit modification.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] None known or anticipated.

IMPACTS ON THE HUMAN ENVIRONMENT	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impacts expected.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No negative impact from permit modification.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No negative impact from permit modification.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impacts expected.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No impacts expected.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or	[N] No impacts expected.

IMPACTS ON THE HUMAN ENVIRONMENT		
management plans in effect?		
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] No impacts expected.	
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impacts expected.	
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impacts expected.	
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impacts expected.	
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No impacts expected.	
22(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N] No impacts expected.	
22(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N]	
22(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.		

23.	Description of and Impacts of other Alternatives Considered:				
	A. No Action: Denying approval of LAI Yellowstone Mine's requested permit modification would result is less stormwater retention/sedimentation/infiltration capacity which would increase the possibility of a discharge resulting from rainfall events nearing the 10 year, 24 hour design requirement.				
	B. Approval with modification: No reasonable modification options exist.				
24.	Summary of Magnitude and Significance of Potential Impacts: None				
25.	Cumulative Effects: None				
26.	Preferred Action Alternative and Rationale: Approve the request to modify the MPDES permit to allow substitution of Pond 9A for proposed Pond 6A and Outfall 003 from Pond 9A. The MPDES program provides the regulatory mechanism for protecting water quality by enforcement of the terms of the permit.				
Recon	nmendation for Further Environmental Analysis:				
[]	EIS [ ] More Detailed EA [ X ] No Further Analysis				
Ration	ale for Recommendation:				
27.	Public Involvement: The Department intends to issue a public notice and solicit public comment on this action. All substantive comments will be considered in development of the final permit modification.				
28.	Persons and agencies consulted in the preparation of this analysis: None				
EA Cl	necklist Prepared By: James F. Brown Date: November, 2008				
Appro	oved By:				
•	Chambers, Chief Date Protection Bureau				